DOCUMENT RESUME

ED 057 873 LI 003 386

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TITLE	Authority and Responsibilities of a Network Director.
SPONS AGENCY	American Library Association, Chicago, Ill.; Office of Education (DHEW), Washington, D.C.
PUB DATE	28 Sep 70
NOTE	20p.; (19 References); Working Group D-6
AVAILABLE FROM	In "Proceedings of the Conference on Interlibrary Communications and Information Networks," edited by Joseph Becker. American Library Association, 50 E. Huron St., Chicago, Ill. 60611 ($15.00)
EDRS PRICE	MF-$0.65 HC-$3.29
DESCRIPTORS	Conferences; *Information Networks; *Library Cooperation; *Library Networks; *Management; *Responsibility
IDENTIFIERS	*Interlibrary Communications

ABSTRACT

A network director is an individual who: is visionary yet practical; possesses understanding of the human animal; has good interpersonal relationships; is committed to the user not the institution; is knowledgeable in regard to the various types of participating institutions; recognizes the network must be built strength on strength; is a skillful change agent; comprehends the need for research and development before implementation; recognizes the role of management improvement; recognizes the need for retraining; has the ability to generate fiscal support; utilizes various disciplines; understands the place of law; and is knowledgeable and effective politically. Each characteristic is examined in detail. The task of managing library networks involving a variety of types of institutions is an uncharted area. From what we know now the task is so complex no one individual will have the necessary skills to properly discharge the responsibility; therefore, networks will bring about new organization structure and methods of management. The amount and kind of authority will develop somewhat gradually as the concept takes form and levels of development are put into operation. (Other papers from this conference are available as LI 003360 - 003385 and LI 003387 through LI 003390) (Author/NH)

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AUTHORITY AND RESPONSIBILITIES OF A NETWORK DIRECTOR

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LI 000 386

September 28, 1970

Prepared for: Conference on Interlibrary Communications and Information Networks

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INTRODUCTION

A comprehensive but fruitless literature search was undertaken to learn what concepts had been advanced on the topic "Responsibility and Authority of a Network Director" as well as what experiences had been reported by individuals having held such a position. The initial reaction was incredulity that among the endless flow of information on how to contain and retrieve the endless flood of information, not one (well, hardly one) word on the management. Apparently all this change is to occur through the efforts of disembodied beings.

The thought came to me that as far as the management aspects were concerned all of the discussions were like a bikini, what they reveal is interesting but what they conceal is vital.

One problem became evident. "Network" is a term that means everything, anything or nothing. Total confusion exists, such confusion no doubt having some bearing on the lack of discussion on managing the beast. It will therefore be necessary to define what kind of a network the hypothetical director (the subject of this paper) is supposed to manage.

More reading and thinking made a statement by Henriette Avram seem more and more applicable. "The parts, functions and attributes of a library network are so inextricably related that the examination of any element must impinge on the other elements." While every effort has been made to avoid impingement, the objective proved impossible to achieve. It is impossible to discuss the responsibility and authority of a director without <u>some</u> overlapping into areas assigned to others.

A tentative premise has become a conviction in the process of developing this paper - an information network, within the definition postulated, cannot be separated from an institution or from the participating institutions. To

separate management of the network from the agencies forming the network will, in this writer's opinion, doom its success. We are on the threshold of an entirely changed method and structure for meeting the information needs of society.

Peter Drucker takes the position that knowledge has become the central economic resource in today's world. He also postulates that continuing education is essential and that access to information throughout life is vital. In discussing this, he says:

> "Information is energy for mind work. This is indeed the first era when energy for mind work has been available. Information through the ages has been all but completely lacking. At best it has been expensive, late, and quite unreliable. Most people in responsible positions today, whether in government, in hospitals, in research labs, or in business, spend most of their time scratching to get a little incorrect and unreliable information on what happened yesterday.
>
> "The impact of cheap, reliable, fast, and universally available information will easily be as great as was the impact of electricity. Certainly young people, a few years hence, will use information systems as their normal tools, much as they now use the typewriter or the telephone. Yet the telephone eighty years ago evoked somewhat the same panic the computer now does. In another generation, it is safe to predict, people will have learned that the computer is their tool and not their master, and that it enables them to do the mind work they want to do and are unable to do today for want of cheap, reliable,

and fast information." [1].

To assume we can "superimpose a network is to fail in developing the information resources Mr. Drucker envisions. Institutional change into network components is what is required.

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1. Drucker, Peter F.
The Age of Discontinuity. Harper & Row 1969

DEFINITION

As used here, network means a statewide system encompassing on a formal basis all types of information agencies meeting specified criteria, tied together with a communication system having bi-directional capacity, including a look-up system and providing switching capabilities for optimum routes. The network also provides the capability for communicating with information networks at the regional and national levels.

Such a network will utilize all print and non-print information resources, most probably will develop original information files, and make possible an enlarged concept of information service.

If, (to quote one interested person) "this network is to be just beefed up interlibrary loan" we can never justify the costs.

CHARACTERISTICS OF A NETWORK DIRECTOR

An individual who:

Is visionary yet practical; possesses understanding of the human animal; has good interpersonal relationships; is committed to the user not the institution; is knowledgeable in regard to the various types of participating institutions; recognizes the network must be built strength on strength; is a skillful change agent; comprehends the need for research and development before implementation; recognizes the role of management improvement; recognizes the need for retraining; has the ability to generate fiscal support; utilizes various disciplines; understands the place of law; and is knowledgeable and effective politically.

At the risk of being redundant, each characteristic will be examined in greater detail as to why it is important.

Visionary yet Practical

What now seems improbable will one day be ordinary; consequently in developing information networks the goal should be based on potential, working back to where we are today. In this manner steps toward the improbable future will be realistic in terms of achievement. The director must have an understanding of the potential of computer and communications technology as well as present limitations. While there are many questions which must be answered before the future is the present, progress has been made on solutions to these tough technical and professional tasks.

An Understanding of Humans

Such an understanding is needed by everyone, of course, but to comprehend insofar as is possible how humans behave and react

is a quality so valuable and desirable it is in a special category. Apparently individuals endowed with this capacity have sensory antennae which convey important signals alerting him to such things as: the person isn't saying what he thinks; he is not hearing what is said; policies will be "interpreted" to suit the individual's personal convictions on the subject; warning of potential personality clashes; etc.

Many theories of management completely ignore how people really work (which explains their failure). It is essential that the person in charge of a highly complex operation be able to assess management theories in order to accept elements that will be successful and reject those that will not. Special recognition must be given to acknowledging that one method does not work equally well with everyone. This capacity cannot be acquired by people without it, but can be improved and developed by the person endowed with it.

One speaker who, as an expert on management, was expounding on the subject told about the astounding discovery he had finally made after years of advocating sensitivity training, courses in how to relate, etc., that "you can't make an insensitive person into a sensitive one!"

In the early days of aviation, especially good pilots talked about flying "by the seat of their pants." Even in today's highly technical instrument flying, a pilot having this "feel" for interaction among individuals and reaction of an individual can make the difference between success and failure.

Concern for the User

We need to have a marketing approach that looks upon the network from the viewpoint of its ultimate purpose and justification, that is, from the point of view of the users. What do we really know about users (and potential users), their expectations, values and behavior, especially how do people seek information now. What studies there are challenge our current approach to meeting "needs" does not exist. However, there is such a thing as innovative marketing. New technology needs new markets which were not even conceivable until the new technology created new demands. The telephone is frequently cited as an example of the kind of response possible to operating information networks.

Knowledge of the various types of Participating Agencies

Librarians of each institutional type are convinced their problems are special and that only a member of "their" community can understand and help solve. Actually, the problems vary more in scope than in kind. However, there are some deeply rooted philosophies of how the various communities of users should be served that differ sharply and must be understood. Not all librarians in each category subscribe to the philosophy of the majority of their colleagues, a point also very important to understand. To successfully bring these traditionally separate institutions into an organization which achieves more than interlibrary loan, a working knowledge of the present situation within each institutional type is needed.

Strength on Strength

Not all components of a network will have equal strength, but all participants should be able to be a contributor as well as a user (institutional). Criteria for participation is essential. Not even the largest institution can acquire "everything" yet there should be a basic structure of strength of resources before turning to others, regardless of the type of library. How this basic structure is organized may vary from area to area, state to state, region to region, and even conceivably nation to nation.

Change Agent

No institution and no individual staff member within the institution participating in the development, implementation and operation of a network will ever be the same again - if the network is to become a successful reality. Not everyone likes change. No one likes all changes, but in developing such a concept a zest for change is essential, but should be modified by a clear recognition that not all change is necessarily desirable or essential. To be able to enlist people in an enthusiastic drive to discover desirable and effective changes is a quality much needed in a network director.

Research and Development

Skill in utilizing business and industry methods and techniques to measure information values is a must. The inability of those of us in information services to adequately utilize research as a means for planning development may well be one reason for the slowness of development as well as failure of some programs.

The rate of technological change is said to be determined by:

1. Amount of resources invested in research;
2. Number of persons understanding the problem and having sufficient knowledge to tackle it;
3. The amount of effort put in to make improvements that lean heavily on practical experience. (This is usually done by a succession of minor improvements);
4. Market structure;
5. Legal strictions;
6. Attitudes toward change;
7. Timing;
8. Willingness to take risks.

We need to be able to measure the effectiveness of information as well as the efficiency of the information services. It is acknowledged that it is difficult to measure the value of information, but is it possible?

The problem was once put very succinctly by Dr. Robert D. Leigh, "It is easy to arouse the public to the financial and social costs of an epidemic of smallpox, but how do we arouse them to the terrible costs of an epidemic of ignorance?"

Management Improvement

Anyone working toward an operating information network as herein defined must understand that before final programming and implementation a searching system analysis of all phases of present operations must be made and changes in manual procedures incorporated. Why provide a speedy means of forwarding requests and delivering the material by facsimile if the library receiving

the requests only handles them once a week? As of today, significant improvements can be made by improving our internal operations as well as our attitudes. In the process of working with this aspect, the enthusiasm for and understanding of the need of further change can be developed in the personnel within the participating institutions.

The potential for generating management information not now available is almost limitless, consequently careful analysis must be made as to the kinds of continuing data which may be utilized by all participants to plan for improved service. Clearly an opportunity for more precise collection management is basic in network operation. To capitalize upon the opportunity will require changes in attitudes and goals.

Retraining

Hand in hand with "retooling" of operations goes retraining of personnel. Its importance cannot be over-emphasized. Leadership in generating recognition of the need and desire to participate in programs of continuing education, along with implementation of effective programs, is definitely within the scope of the management area of networking.

Skill in Generating Fiscal Support

This hardly needs elaboration.

Utilization of Various Disciplines

We could say that this is like funding, so obvious it needs no elaboration but as yet we as a profession have shown no great inclination to bring into our ongoing planning, development and operation the non-information science oriented expertise. We

contract for technical help but have been slow to add such skills on our own staffs where the specific knowledge of day to day operations and exchange between disciplines, all with an understanding of what the problem is, will bring solutions which can be successfully implemented and maintained. New and different demands upon the executive mean new and different opportunities. All the skills needed must be brought together to solve the problems and to build a viable operation.

Legal

A clear understanding of the need for statutory authority drafted in such a way as to provide the necessary legal base, yet allow for flexibility in operation and development. Knowing how to handle this aspect in relation to existing situations and in regard to administrative and legal attitudes about how you interpret laws can be especially critical in helping to avoid future need for changes in statutory language.

Knowledgeable and Effective Politically

Perhaps politics needs to be defined. There are many kinds of politics although the basic elements in all remain the same whether in business, family, organizations or government. In this instance we are referring to the politics of government regardless of partisanship. Actually, knowledge and effectiveness are not the same, for a person can have technical knowledge of the entire political process and be totally ineffective. However, to be effective one must be knowledgeable. Being able to work with the political process in such a way as to achieve the backing, both financially and

philosophically, for the program objectives, is essential to the successful development of such a complex conception as the information network.

ANALYSIS OF RESPONSIBILITY

As we review these "characteristics" it becomes clear that in performance these become responsibilities. No one individual will ever be able to handle all of these responsibilities equally well. Perhaps then, the most important responsibilities of a network director are to assess personal weaknesses and attract top flight personnel with strengths in the needed areas. Having succeeded in this, the next responsibility would be to assign personnel where they can operate most effectively for the benefit of the network and the individual. Thus organized, provision will have been made for all aspects of known and potential responsibilities.

Possibly we need two organizations, the innovative and the managerial. The innovative organization responsible for blue-skying, research and pilot development. The Managerial organization responsible for the actual operating network. If this approach appears to be the most productive, the director has the responsibility to interweave the approaches so that as the innovations are ready for testing the home institution is ready to become the pilot project. At this point we are impinging on structure, which is not the topic we were assigned.

When all is said and done, network needs will be met if they are regarded as opportunities and not responsibilities.

AUTHORITY

Apparently no one has wanted to face up to what authority would be required to achieve massive institutional change in how information is produced, organized, stored and retrieved. Society cannot afford to duplicate the present storehouses but there is nothing to prevent new organizations arising to serve as producers, organizers, storers and retrievers of all future information, resulting in the present institutions becoming "vestigial remains" of previous eras.

In most discussions of effective organizations the statement is made that "authority" is needed to get the job done, yet rarely is the scope of the authority needed defined. Inasmuch as we have addressed ourselves to a network largely composed of public agencies it can be assumed that the political decisions (choice between values) will not be easily achieved. Sources of funding will also have much to do with the assignment of authority.

Perhaps we can only say that real authority will have to be given to the administrator, no matter how, and some authority will have to be relinquished on the part of the participating institutions.

In the introduction we stated that institutions will be changed. This change will come about gradually and no doubt the placement of authority will change gradually as experience and increased understanding of networking indicate.

CONCLUSIONS

The task of managing library networks involving a variety of types of institutions is an uncharted area. From what we know now the task is so complex no one individual will have the necessary skills to properly discharge the responsibility; therefore, networks will bring about new organization structure and methods of management. The amount and kind of authority will develop somewhat gradually as the concept takes form and levels of development are put into operation.

READINGS

Many more books and articles were examined, scanned and read than appear on the following list. These, however, probably triggered more thinking on the subject than any of the others.

Becker, Joseph and Olsen, Wallace C.
Information Networks. ANNUAL REVIEW OF INFORMATION SCIENCE AND TECHNOLOGY, v.3, 1968. pp 289-319.

Bolt, Beraneck and Newman, Inc.
Toward the library of the 21st Century; a report on progress made in a program of research sponsored by the Council on Library Resources. Cambridge, Mass., 1964.

Brown, George W., ed.
Edunet: Report. A summer study on information networks conducted by Interuniversity Communications Council (EDUCON). Wiley, 1967.

Bush, Vannevar
As we may think. ATLANTIC MONTHLY, July 1945. pp 101-108.

Carter, Launor F.
National document handling system. System Development Corporation. Wiley, 1967.

Clapp, Verner W.
The future of the research library. University of Illinois Press, 1964.

Cox, Nigel S.
The computer and the library. University Library publication No. 4. University of Newcastle upon Tyne Library, 1966.

Davis, Ruth
The relationship of regional networks to the National Library of Medicine's Biomedical Communications Network. THE BOOKMARK (New York State Library), v. 28, No. 4, January 1969, pp 109-113.

DeGennaro, Richard
The development and administration of automated systems in academic libraries. JOURNAL OF LIBRARY AUTOMATION, v.1, No. 1, March 1968, pp 75-91.

Drucker, Peter F.
The age of discontinuity. Harper & Row, 1969.

Governor's Conference on Libraries
Developing partnerships for California Libraries. NEWS NOTES OF CALIFORNIA LIBRARIES, v.63, No. 4, Fall, 1968 (Entire issue).

Jones, S. O.
User needs: a local response. American Society for Information Science, PROCEEDINGS, v.5, p 338+.

Kromer, Charles
Establishing the information system. Detroit, Michigan-Ohio Regional Educational Laboratory, 1969.

Licklider, J. C. R.
Libraries of the future. M.I.T. Press, 1965.

Lorenz, John G.
Networks for knowledge. MOUNTAIN-PLAINS LIBRARY QUARTERLY, v.14, No. 1, Spring 1969, p 3-6.

Mansfield, Edwin
The economics of technological change. Norton, 1968.

MEDICAL LIBRARY ASSOCIATION BULLETIN
(Numerous issues!)

Morse, Philip M.
Library effectiveness: a systems approach. M.I.T. Press, 1968.

Overhage, Carl F. J. and Harman, R. J.
Intrex: report of a planning conference on information transfer experiments. M.I.T. Press, 1965.

ABSTRACT

The task of managing library networks involving a variety of types of institutions is an uncharted area. From what we know now the task is so complex no one individual will have the necessary skills to properly discharge the responsibility; therefore, networks will bring about new organization structure and methods of management. The amount and kind of authority will develop somewhat gradually as the concept takes form and levels of development are put into operation.